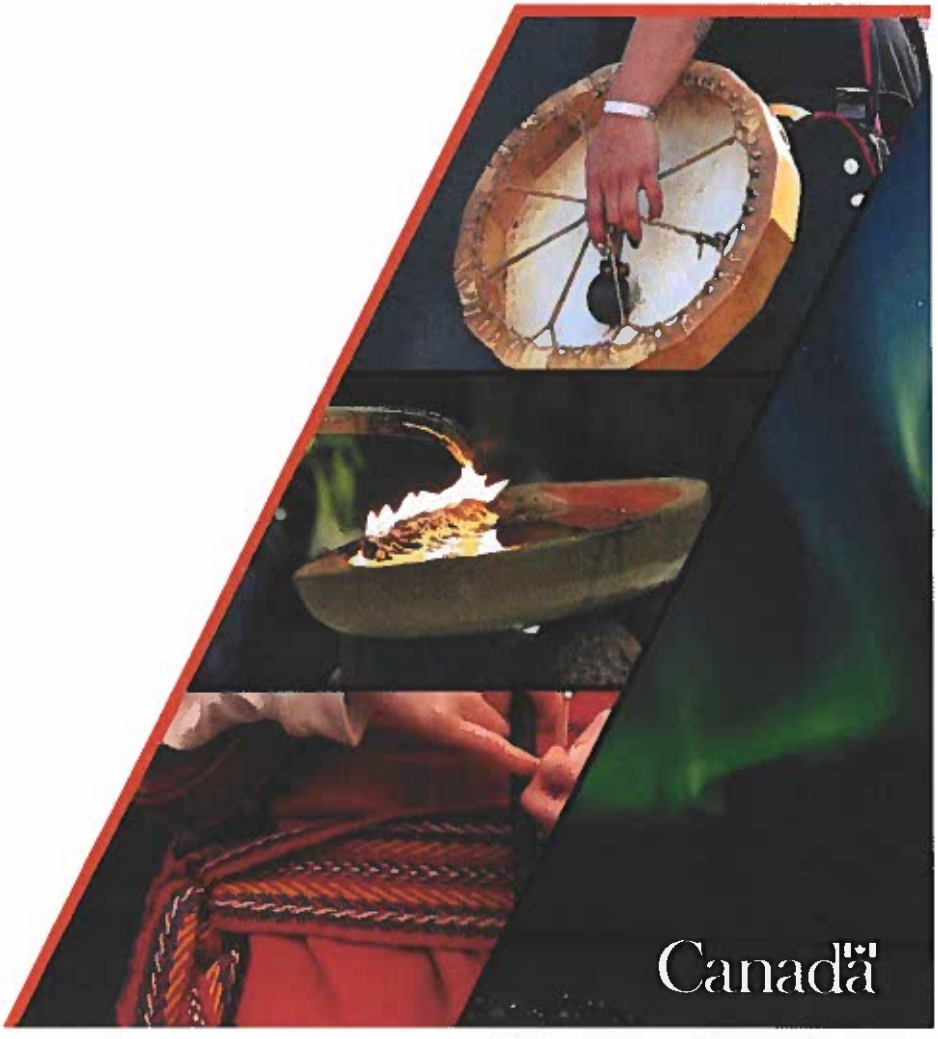
Crown-Indigenous Relations and Northern Affairs Canada
Relations Couronne-Autochtones et Affaires du Nord Canada

# CIRNAC COMMENTS TO NIRB

## Re: Notice of Screening for "Apex River Drinking Water Supply"



Nunavut Regional Office
P.O. Box 100
Iqaluit, NU, X0A 0H0

Your file - Votre référence
NIRB file #19UN013
Our file - Notre référence
CIDM #1243483

March 7, 2019

Keith Morrison
Technical Advisor II
Nunavut Impact Review Board
PO Box 1360
Cambridge Bay, NU, X0B 0C0
Via electronic mail to: info@nirb.ca

**Re: Notice of Screening for the City of Iqaluit's "Apex River Drinking Water Supply" project proposal;**

Dear Mr. Morrison,

On February 14, 2019, the Nunavut Impact Review Board (NIRB) invited parties to comment on the City of Iqaluit's "Apex River Drinking Water Supply" project proposal. Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) appreciates the opportunity to provide comments and offers the responses below as it pertains to the NIRB's request:

**Whether the project proposal is likely to arouse significant public concern; and if so, why;**

The submitted application states the City of Iqaluit met with the general public on December 5, 2018 and with the Amaruq Hunters and Trappers Association (HTA) on November 16, 2018 to discuss their project proposal. No reference is provided on the number of people who attended these meetings/information sessions, where these events occurred, and what issues were discussed. The submitted Engagement Plan and Record states that a second meeting with the Amaruq HTA was planned for the week of February 4, 2019. It is noted that the City of Iqaluit prepared an information package on the project proposal for the general public and requested comments or feedback by December 2018. No details are provided on how this information package was distributed to residents (e.g., city website and social media), when it was distributed, and what issues were addressed. The comments or feedback from Apex residents are of particular importance because they would be most affected by project activities

CIRNAC recommends that the City of Iqaluit communicate the locations, level of participation, and issues addressed at their community engagement activities. This would include the December 5, 2018 meeting with the general public, the November 16, 2018 meeting with the Amaruq HTA, and a planned follow-up meeting with the Amaruq HTA.

If there is no record of comments or feedback from Apex residents on the proposed project, the City of Iqaluit should consider holding an additional information session(s) at a location in Apex. The results of any upcoming information sessions should be communicated to the NIRB.

**Whether the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects; and if so, why;**

**Alternatives Assessment:**
It is not evident that the City of Iqaluit has considered alternatives to pumping water from Apex River (on a yearly basis) to supplement the Lake Geraldine Reservoir until a more permanent solution can be implemented. An alternatives assessment would demonstrate what options were considered and why pumping water from this source is the most suitable choice. This assessment may have occurred last year when the City of Iqaluit conducted a similar project to offset an emergency water shortage.

CIRNAC recommends that the City of Iqaluit provide an alternatives assessment that explains why pumping water from Apex River to supplement the Lake Geraldine Reservoir is the most suitable option to address annual water shortages until a more permanent solution can be implemented.

**Potential impact to fish and fish habitat:**
It has been identified in the Proponent's application that the Department of Fisheries and Oceans (DFO) recommends specific withdrawal parameters to not exceed 10% of the instantaneous flow when natural flow is below 30% mean annual discharge (MAD) when pumping from the Apex River. This approach is accepted to have a low impact to the fisheries during withdrawal.

In the project application the Proponent states that serious harm to the resident population of arctic char may occur if water withdrawal parameters are not met. Under such conditions potential adverse effects may include:

- reduction of fish habitat including overwintering habitat due to water withdrawal; and
- mortality of fish by stranding due to water withdrawal.

The Proponent's application further states that:

Should water withdrawal occur at a rate that exceeds 10% of instantaneous flow, or when natural flows are below 30% MAD in order to meet the City's water supply needs, additional monitoring will be triggered, which would include:

- Four locations downstream of the pumping locations will be monitored to assess the potential physical effects of pumping on fish and fish habitat. Cross-sections will be surveyed and rebar installed to represent the local reference datum against which to monitor water level and wetted perimeter and daily measurements of the distance from the top of the rebar to the water surface will be recorded;
- Monitoring and response in accordance with the Fish and Fish Habitat Monitoring Plan; and,
- Additional monitoring will be considered based on DFO recommendations.

Should the project proposal be approved, CIRNAC recommends that the NIRB include additional terms and conditions that require the Proponent to cease withdrawal from the Apex River if the DFO withdrawal parameters cannot be met and for pumping to continue only under advisement of the DFO.

**Whether the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (please provide any recommended mitigation measures);**

Although the Proponent included a spill contingency plan with the project proposal, the plan lacks some additional measures that should be followed in regards to preventing water pollution from refuelling and other hazardous materials. CIRNAC recommends NIRB to include the following additional terms and conditions, should the project proposal be approved to proceed:

- Fuel dispensing area should be designed to contain spills and equipped with spill response supplies including: shovels, pumps, barrels, drip pans, and absorbent materials;
- Drip pans or other equivalent devices should be used during fuelling of equipment
- All vehicles and equipment used for fuelling should be properly maintained and in good working condition to minimize potential leaks from hydraulic hoses and other sources;
- Spill response equipment and clean up materials including: shovels, pumps, barrels, drip pans, and absorbents should be readily available during transport and transfer of the fuel; and,
- All personnel involved in fuelling must be properly trained in fuel and hazardous waste handling procedures.

**Any matter of importance to the Party related to the project proposal.**

In reference to the article: *Hydrologic monitoring tools for freshwater municipal planning in the Arctic: the case of Iqaluit, Nunavut, Canada* (June 2017)[1] research indicates that use of the Apex River as an alternative freshwater source for the replenishment of the Lake Geraldine Reservoir would only provide a 2 year extension (within the DFO recommended withdrawal parameters) to the current municipal supply.

CIRNAC recommends that the Proponent address the findings of this research and demonstrate in detail to the NIRB how it is possible for the Apex River to provide the proposed quantity of supplemental water while ensuring the quality and quantity of the freshwater in the Apex River and fishery is maintained for 7 years (i.e. the duration of the water licence application).

**Environmental Impacts Matrix:**
The Proponent's impact identification matrix indicates under the "Operation" heading an activity named "other". CIRNAC recommends that the Proponent provides clarification as to what "other" refers to.

CIRNAC appreciates the opportunity to provide comments and looks forward to working further with the NIRB and the Proponent, as necessary, throughout any further review related to this project. Should you have any questions, please contact Krista Pooley at (867) 975-4587 or by e-mail at krista.pooley@canada.ca.

Sincerely,

Felexce Ngwa
Manager, Impact Assessment

[1] Canada. Bakaic Micheal, Medeiros Andrew Scott, Peters Jessica F., Wolfe Brent B. *Hydrogeologic monitoring tools for freshwater municipal planning in the Arctic: the case of Iqaluit, Nunavut, Canada*. June 6 2017.